Yale Family DNA Test Results

1. Introduction

This DNA study was undertaken to document the paternal and maternal genetic lineages of the Yale family, examine their geographic and historical origins, and preserve the findings as part of the Max Brian Yale Genealogical Collection on Internet Archive.

The principal objectives of the research are:

1. **Paternal ancestry:** To investigate the origins and historical development of the direct paternal Yale lineage through Y-DNA testing, in order to better understand the ancestry of the Yale family.
2. **Geographic origins:** To examine the lineage's historical presence in Ireland, England, Wales, and other parts of Europe, including its relationship to ancient and modern populations.
3. **Osborn Wyddel:** To investigate whether Osborn Wyddel, an early ancestor of the Yale family, was descended from the Norman Maurice FitzGerald and the Geraldine family, or instead belonged to the native Irish population. This is an important genealogical question that helped motivate Big Y-700 testing. See the biography of Osborn Wyddel.
4. **Maternal ancestry:** To document Lynne Rae Yale's mitochondrial DNA results and investigate the maternal lineage they represent.

Summary of Findings:

- The Yale line descends from an ancient ancestor who lived in Ireland about 4,300 years ago.
- The Big Y-700 DNA matches show a strong Irish connection, particularly southern Ireland. The evidence is consistent with native or Gaelic Irish ancestors, while no direct genetic connection to the Fitzgerald or Geraldine paternal line has been identified.
- These findings do not conflict with the traditional account of approximately 400 years of Welsh paternal ancestry, from about 1240 to 1640. The DNA evidence provides a much earlier perspective on paternal origins.

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2. Paternal DNA Study — Max Brian Yale

2.1 Y-DNA Tests, Kit 166857

In January 2010, a 37-marker Y-DNA test was completed. In November 2026, the results of the Big Y-700 DNA test were released. Both tests were conducted on FamilyTreeDNA.

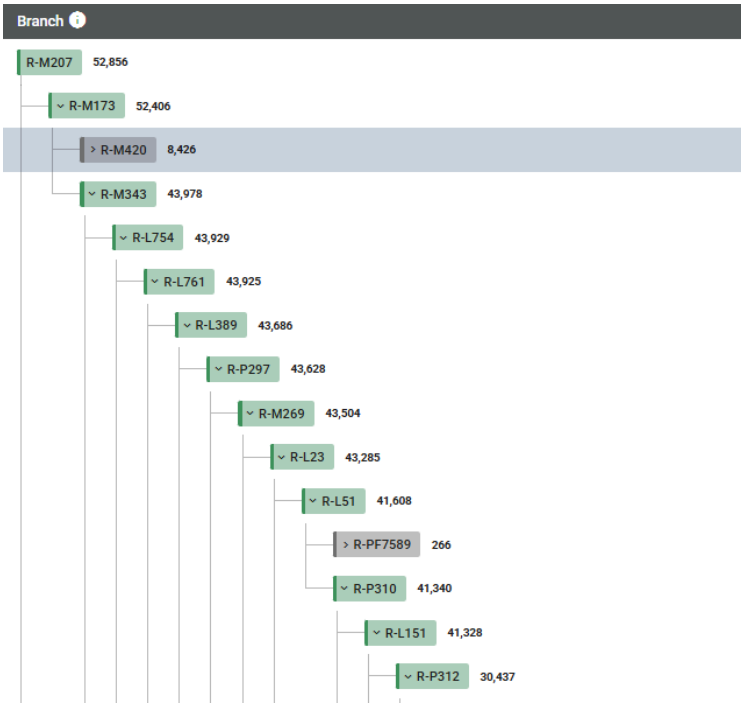
For males, Y-DNA testing examines specific locations on the Y chromosome, called markers. FamilyTreeDNA offers several levels of marker testing, ranging from 12-marker tests to the Big Y-700 test.

Because the Y chromosome is passed from father to son, with occasional mutations, men who descend through an uninterrupted paternal line from a common male ancestor will have very similar Y-DNA profiles. The results can therefore help verify or challenge paternal relationships in family genealogies.

The Big Y-700 test examines thousands of locations on the Y chromosome and identifies mutations called SNPs (single-nucleotide polymorphisms). These SNPs define haplogroups, which are organized into a branching structure called a haplotree.[1]

The Big Y-700 test identified my terminal haplogroup as **R-FTA36874**. A terminal haplogroup is the most downstream branch currently assigned to a tested individual on the haplotree. It represents the most specific paternal lineage that can presently be identified from the available SNP evidence.

Here is the first part of my haplotree:[1]



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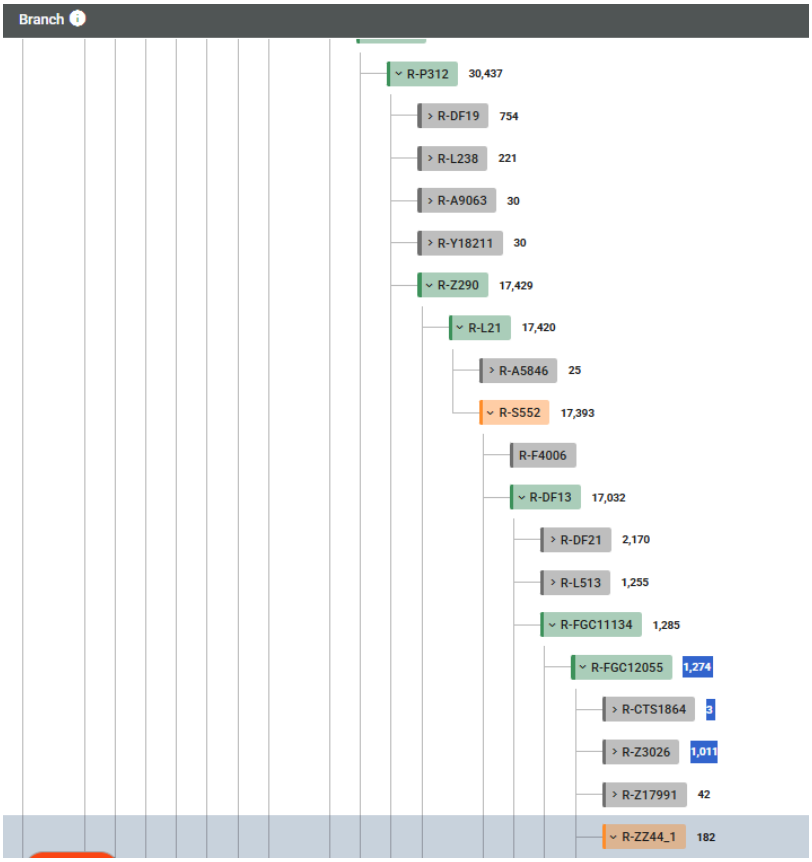
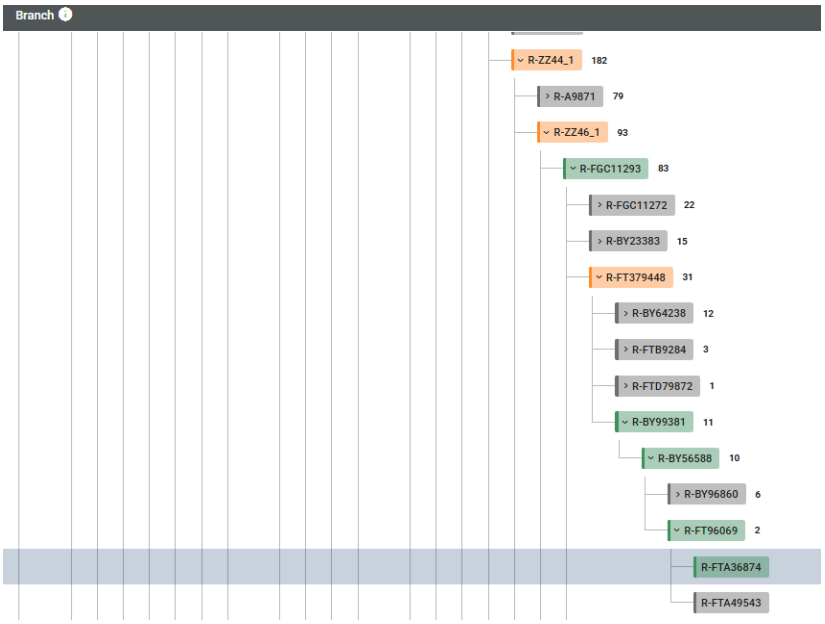
The haplogroups shown in green above represent mutations for which I tested positive. Those shown in grey were not tested. Haplogroups shown in orange are presumed positive because a confirmed downstream mutation establishes that the ancestral branch must also be part of my lineage. The number to the right of each haplogroup is the number of members who tested positive for that branch.





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The terminal haplogroup R-FTA36874 represents a relatively recent branch. According to FamilyTreeDNA[2], “The man who is the most recent common ancestor of this line is estimated to have been born around 650 CE.” As of November 2026, there are only two other people who are members of this haplogroup - one from Wales and one from Germany.[1]

2.2 Haplogroup Chronology

The haplotree shows how successive paternal branches developed over thousands of years.

My lineage belongs to the broader R-FGC11134 haplogroup, which is part of the much larger R-M269 family of paternal lineages.

The following diagram and table show the last ten haplogroups in my paternal line and their estimated dates.[3]

Steps ↑	Haplogroup	Age Estimate	Archaeology Era	Time Passed	Immediate Descendants	Tested Modern Descendants
1	R-FTA36874	650 CE	Middle Ages	<100 years	2	2
2	R-FT96069	600 CE	Middle Ages	150 years	2	4
3	R-BY56588	450 CE	Imperial/ Middle Ages	2,300 years	2	15
4	R-BY99381	1850 BCE	Metal Ages	100 years	2	16
5	R-FT379448	1950 BCE	Metal Ages	<100 years	4	40
6	R-FGC11293	1950 BCE	Metal Ages	150 years	5	141
7	R-ZZ46_1	2100 BCE	Metal Ages	<100 years	3	160
8	R-ZZ44_1	2150 BCE	Metal Ages	<100 years	4	302
9	R-FGC12055	2200 BCE	Metal Ages	100 years	8	5,069
10	R-FGC11134	2300 BCE	Metal Ages	250 years	2	5,385

2.3 Ancient DNA and Geographic Distribution

At a high level, I am a member of the R-FGC11134 haplogroup, which originated in Ireland about 2300 BCE.

FamilyTreeDNA currently reports 5,385 people in the R-FGC11134 haplogroup, distributed as follows:[9]

Reported country	Number
Ireland	1,350
United States	414
Scotland	212
Other countries	3,409
Total	**5,385**

These figures represent the reported distribution of tested members, not necessarily the geographical distribution of the ancient ancestors who first carried the haplogroup.

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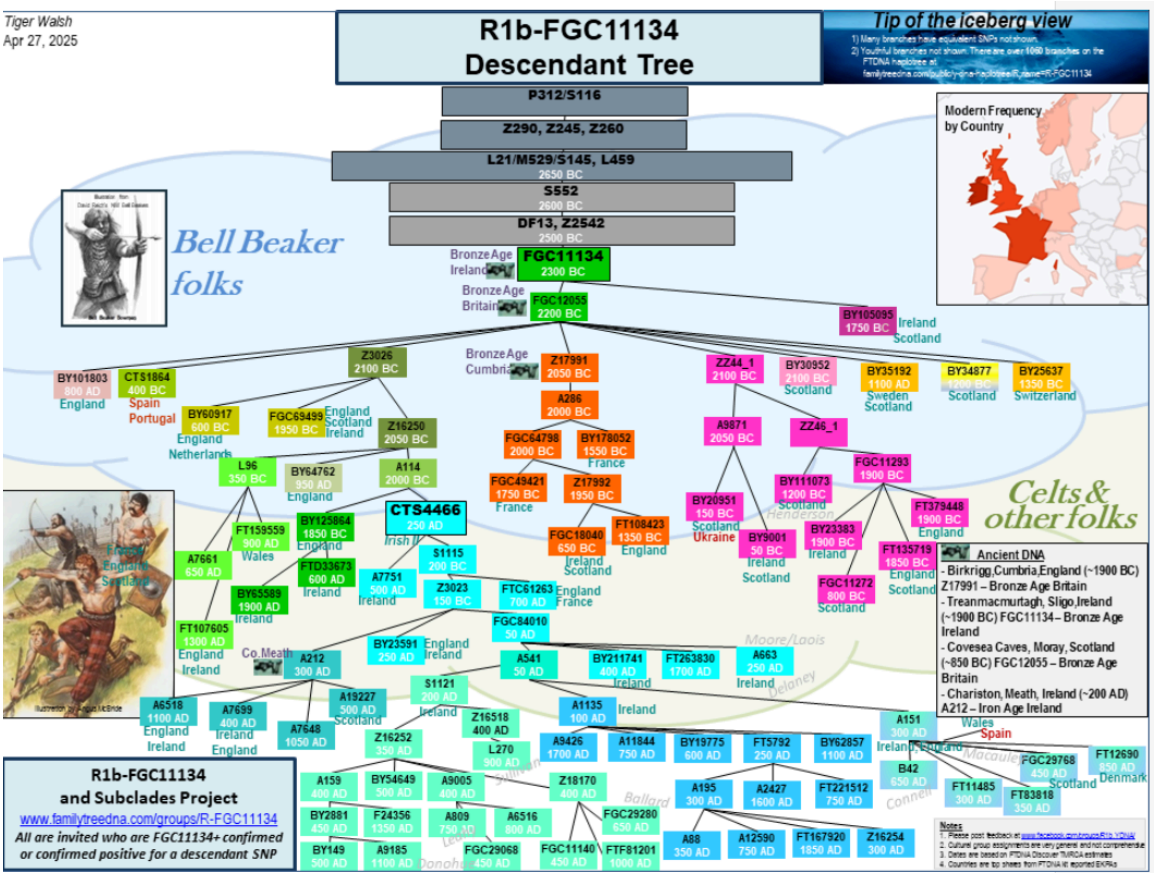
R-FGC11134 was present in Ireland by approximately 2300 BCE, as shown in the table in section 2.2. Today, more than 1,300 members of the FamilyTreeDNA project report Ireland as the country of their paternal ancestry. Together, the ancient DNA findings and the substantial modern Irish representation support the conclusion that R-FGC11134 has maintained a continuing presence in Ireland for approximately 4,300 years.

I joined the special-interest project established for this haplogroup.[4] The project administrator prepared a descendant-tree diagram showing how the branch developed over time.



Courtesy Tiger Walsh, FGC11134 Project Administrator

The Bell Beakers

The Bell Beaker people are named for their distinctive pottery, which is found across parts of Europe during the third millennium BCE. Their movements and genetic contributions are relevant to the early population history of Britain and Ireland.[5,10]

I am descended from an ancient ancestor in every haplogroup on the haplotree above. The Bell Beaker people brought the R-FGC11134 paternal lineage into Ireland around 2300 BCE. I carry this mutation and am therefore descended through my direct paternal line from a Bell Beaker ancestor who lived in Ireland at that time.

This means the Yale line descends from an early ancestor who lived in Ireland about 4,300 years ago.

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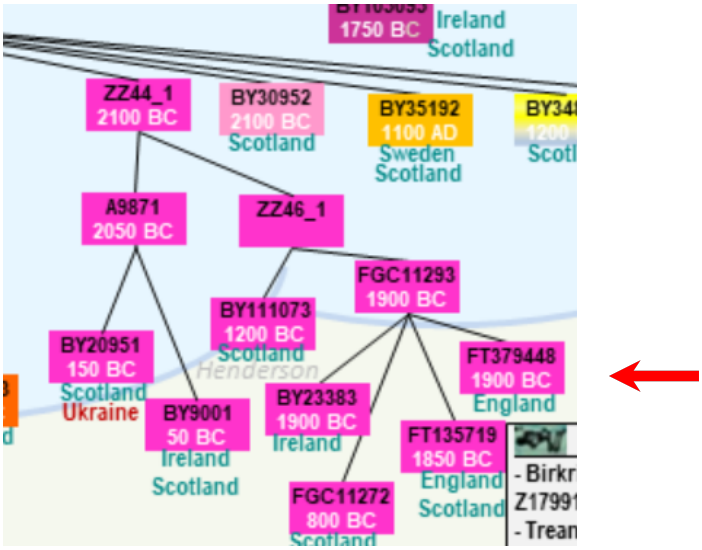
The diagram above shows some downstream haplogroups that pertain to my paternal lineage including haplogroup R-FT379448, which is associated with England around 1900 BCE.



The diagram does not show all of my downstream branches, or subclades. Missing are subclades R-BY99381, R-BY56588, and R-FT96069, which are part of the more recent development of my paternal lineage.

Although R-FT379448 is associated with England around 1900 BCE, the later geographic distribution of its subclades shows that a branch of this lineage eventually returned to Ireland. When this occurred, and whether further DNA testing can help establish the timing, remain open questions.

2.4 Modern DNA Matches

My FamilyTreeDNA 25-marker match list contains approximately 983 men.[6] The dominant association is with Ireland: There are 139 members who report Ireland and 13 who report Northern Ireland as the country of their paternal ancestry.

Among the 106 closest matches—those with an exact or one-step difference—34 report Ireland or Northern Ireland.

I have 13 exact matches on the 25-marker test and they all have apparent Irish connections:[6]

- Five report Irish or Northern Irish paternal ancestry.
- Two have the Yale surname (see Edward Curtis Yale and Richard Gamber Yale below).
- Four have the surname Meredith and do not report their ancestry. Meredith is a Welsh name commonly found in Ireland.
- Two others, Dunn and Dwyer, do not report their ancestry; both are surnames associated with Ireland.

The Irish matches include a notable concentration in southern Ireland, particularly:

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- **Tipperary:** including Gurtshane, Drombane, and Inchofogerty
- **Limerick:** including Ballyneety
- **Cork:** including Lackavaun
- **Waterford**

In summary, the Y-DNA matches show a strong association with Ireland, particularly southern Ireland. Furthermore, the surnames and reported paternal ancestral locations of my matches are consistent with a predominantly native Irish or Gaelic Irish background, while no direct genetic connection to the Fitzgerald or Geraldine paternal line has been identified in my current matches.

Some specific matches of interest:[6]

Edward Curtis Yale (1 step on 111-marker test)

Edward's FamilySearch genealogy shows that we share a common ancestor with Capt. Thomas Yale (b. 1648), the grandson of Thomas Yale and Anne Lloyd of Plas Grono, Wales.

Given the very close match, FamilyTreeDNA's Time Predictor indicates a 99% probability that we share a common ancestor in the 1600s, which we do. It predicts an even higher probability that we share a common ancestor from 22 generations back. Our traditional genealogy 22 generations back is Osborn Wyddel. If the genealogy is correct, he would be our common ancestor.

Richard Gamber Yale (1 step on 67-marker test)

After some correspondence with Richard, we determined we both are also descended from Capt. Thomas Yale.

Alan Pugh (also a member of the R-FTA36874 haplogroup)[7]

Alan Pugh provides an especially useful comparison from the Big Y-700 testing. He shares my terminal haplogroup, R-FTA36874. Our Big Y comparison shows only three STR differences across approximately 640 compared markers.

His earliest documented paternal ancestor is Roland Pugh, who died in Wales in 1776.

Based on this, FamilyTreeDNA indicates that there is a strong probability that we share a common ancestor in the fifteenth century. In that period, the name Pugh would have been ap Hugh or ap Hew. Several candidates exist from Merioneth during that time. We can speculate that a Hugh-named son of one of the five generations of Osborn Wyddel's descendants associated with Cors-y-Gedol may have been the ancestor of the Pugh line. His descendants would have been known as ap Hugh or Pugh. Further research is needed to establish whether this connection is correct.

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3. Maternal DNA Study — Lynne Rae Yale

3.1 The Mitochondrial Test

This section covers the results of mitochondrial DNA testing for Lynne Rae Yale, kit number 171800, conducted by FamilyTreeDNA in March 2010.[8]

Mitochondrial DNA is passed from a mother to all of her children, but only daughters transmit it to the next generation. Consequently, all children of a woman share her mitochondrial DNA, while only her daughters pass it on.

Lynne's test therefore provides information about her maternal ancestry through her mother, grandmother, and earlier direct maternal ancestors, as well as all her direct maternal descendants.

3.2 Mitochondrial DNA and Haplogroup H5a1

Lynne's 2010 test identified her mitochondrial haplogroup as **H5a1**.

HVR1 REFERENCE SEQUENCE

Show All Positions

Position	CRS	Your Result
16304	T	C

HVR2 REFERENCE SEQUENCE

Show All Positions

Position	CRS	Your Result
263	A	G
309.1		C
309.2		C
315.1		C
327	C	T
456	C	T
573.1		C

The CRS shown in the original test report refers to the Cambridge Reference Sequence, a reference mitochondrial DNA sequence against which variations are compared. Differences from this reference are recorded as mutations.

Because Lynne had relatively few mutations in the HVR1 portion of the mitochondrial DNA sequence, she had a large number of matches in the FamilyTreeDNA database.

At the time of the original report, she had 1,527 database matches.

She had no matches in the higher-resolution HVR2 comparison. This could change as additional people test and the database grows.

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The designation H5a1 is retained here as reported in the original 2010 test. It can be checked against the current FamilyTreeDNA haplotree when this section is updated.

3.3 Database Matches and Geographic Distribution

Lynne's HVR1 matches were reported in the following locations:

Reported location	Number of matches
England or United Kingdom	247
Germany	172
Norway	26
Isle of Man	1

These figures reflect the reported locations of people in the FamilyTreeDNA database who matched Lynne at the HVR1 level.

They provide background information about the distribution of similar mitochondrial DNA sequences, but do not by themselves establish the geographical origin of Lynne's direct maternal ancestors.

3.4 Maternal Lineage

Because mitochondrial DNA is passed from mother to her children, Lynne and I inherited mitochondrial DNA through our maternal line:

Name	Years	FamilySearch ID	Location
Lynne Rae Yale	1944–Living	P746-QJQ	San Diego, CA
Mildred Virginia Roberts	1918–1991	GD8D-6LQ	San Diego, CA
Cora Mildred Cleator	1890–1971	LTCW-51C	Virginia City, Nevada, then San Diego
Virginia Moore	1860–1929	LTCW-1FC	Pennsylvania, then San Diego
Mildred Ann Jones	1842–1915	GV38-L8X	Wales, then Pennsylvania, then Nevada
Mary Morgan	1809–1890	GPZD-95L	South Wales, then Sacramento, CA
Margaret Roberts	1781–dec'd	G95N-32H	Glamorgan, Wales

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4. References

1. FamilyTreeDNA - Big Y-700 Haplogroups and SNPs for Kit 166857
2. FamilyTreeDNA - Discover HaploGroup Reports for R-FTA36874 (Haplogroup Story)
3. FamilyTreeDNA - Discover HaploGroup Reports for R-FTA36874 (Ancestral Path)
4. FamilyTreeDNA - Project FGC11134 and Subclades
5. Facebook: The Bell Beaker people
6. FamilyTreeDNA - Y-DNA Matches - 25 marker matches for Kit 166857
7. FamilyTreeDNA - Y-DNA Matches - Big Y-700 marker matches for Kit 166857
8. FamilyTreeDNA - Mitochondrial DNA results for Kit 171800
9. FamilyTreeDNA - Big Y-700 Haplogroups and SNPs for Kit 166857 - Country Report for R-FGC11134
10. Wikipedia: The Bell Beaker Culture

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